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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,290	03/21/2001	Michael F. Culbert	APL1P211/P2656	6108

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EXAMINER

CZEKAJ, DAVID J

ART UNIT PAPER NUMBER

2613

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/816,290	CULBERT, MICHAEL F.	
	Examiner	Art Unit	
	Dave Czekaj	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

On page 8, the applicant argues that Wang does not teach that the side information file is used to record edit steps by video editing software. While the applicant's points are understood, the examiner respectfully disagrees. The examiner would like to note that while the applicant is arguing this limitation with respect to claims 1, 11, 17, and 19, recording the editing steps is found in the newly added claims 21-23. Therefore the rejection has been maintained.

On page 9, the applicant argues that Wang or Suzuki do not teach or suggest using an edit track to determine bit resolution. While the applicant's points are understood, the examiner respectfully disagrees. See for example Wang figure 10 and column 21, lines 55-67 – column 22, lines 1-14. There Wang discloses the process for determining bit resolution. First the side information file provides the image data to the system. Next a difference measure is taken between the lowest resolution image data and a parameter value. If the difference is less than a threshold, the next highest bit resolution is obtained and retested. This process repeats until the difference exceeds a threshold indicating the correct resolution has been obtained. Hence, the edit track, or side information file, is used to supply the image data necessary to obtain the resolution. Therefore the rejection has been maintained.

On pages 9-10, the applicant argues that Wang does not teach or suggest creating at least one edit object in the edit track. While the applicant's points are understood, the examiner respectfully disagrees. See for example Wang figure 5b and

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column 17, lines 62-67 – column 18, lines 1-21. There Wang discloses that a user can create a custom image icon or edit object for defining image attributes. Once created, the image icon is stored for further use. Therefore the rejection has been maintained.

On page 10, the applicant argues that Wang does not teach or suggest using text to increase the bit resolution. While the applicant's points are understood, the examiner respectfully disagrees. See for example Wang column 16, lines 32-46. There Wang discloses a process for adding or creating a bookmark which is represented by text. The bookmark is placed in the image as desired. Hence, when the text is added to the image, the pixel information has increased thus increasing the bit resolution. Therefore the rejection has been maintained.

On page 10, the applicant argues that Wang does not teach or suggest using blend information to decrease bit resolution of a pixel block. While the applicant's points are understood, the examiner respectfully disagrees. See for example Wang figure 5d, column 15, lines 53-67. There Wang discloses a process for a user to select colors to apply to the images. The examiner notes the user can specify the amounts of red, green, and blue thus blending the three colors to obtain the desired result. Further, decreasing the color attributes would take away information from pixels thus decreasing the bit resolution. Therefore the rejection has been maintained.

On pages 10-11, the applicant argues that Wang does not teach or suggest specifying a region where an edit has occurred. While the applicant's points are understood, the examiner respectfully disagrees. See for example Wang figures 3 and 9. There Wang discloses determining a scene change. The examiner notes that a

scene change indicates an area between points where a major change or edit has taken place such as a fade to black, different background/foregrounds, or many others.

Therefore a scene change indicates a region where an edit has occurred. Therefore the rejection has been maintained.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (5802361), (hereinafter referred to as "Wang"), in view of Suzuki et al. (5883672), (hereinafter referred to as "Suzuki").

Regarding claims 1, 11, and 19, Wang discloses an apparatus that searches images having particular attributes and classifying images according to their attributes (Wang: column 1, lines 7-10). This apparatus comprises "compressing video data with an edit track" (Wang: figure 3, item 303, column 11, lines 13-14 wherein the edit track is the side information file. Although not disclosed, compressing color, texture, and the various other elements in the information file is well known in the MPEG-2 environment). Although Wang shows the edit track contains motion vectors (which are used during compression), Wang does not explicitly disclose using the track during compression. Suzuki teaches that edit tracks are used during the compression

method (Suzuki: figure 6, wherein the edit tracks are the picture information and scene change information which are inputs to the compression method selection circuit and the following compression techniques). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Wang and infer that the edit track or side information file is used during compression since Suzuki shows that it is well known in the art to do so. One would be further motivated since Wang is silent on how the compression scheme works in his apparatus.

Regarding claims 2 and 12, Wang discloses “using information in the edit track to determine the bit resolution for a region defined in the track” (Wang: figure 10, column 21, lines 54-67-column 22, lines 1-15, wherein the edit track is the side information file. The bit resolution is determined by comparing the difference signals at different resolution levels. Once the difference signal exceeds a threshold value, the corresponding resolution is defined).

Regarding claims 3 and 13, Wang discloses “using motion information in the edit track to create a motion vector” (Wang: figure 3, column 9 lines 66-67 – column 10, lines 1-5, wherein the motion information is the motion vector side information file).

Regarding claims 4 and 14, Wang discloses “using information in the edit track to create a difference vector” (Wang: figure 3, column 9 lines 66-67 – column 10, lines 1-5, wherein the motion vector is a difference vector between two frames).

Regarding claims 5 and 15, Wang discloses "using information in the edit track to determine a number of I-frames used for compression" (Wang: figure 3, column 11, lines 19-29, wherein the number of I-frames is located in the scene change detection file. Scene change sequences typically begin with an I frame. Therefore having an information file that contains scene changes would also contain the number of I-frames used).

Regarding claims 6, 7, and 16, Wang discloses "creating a track of edited video data" (Wang: figure 5h, wherein it is shown that a user can change or edit the video data by adding a bookmark) and "creating at least one object in the edit track, wherein the edit object defines a region that has been edited and a type of edit" (Wang: column 16, lines 53-65, wherein the object is the rectangle, which defines the region within in the image, the type of edit is represented by the changing icon).

Regarding claim 8, Wang discloses "using text information in the edit track to increase the bit resolution of a pixel block" (Wang: figure 5h, column 16, lines 32-46, wherein the bookmark is the text information. Since the pixel now contains more information, the bit resolution would increase).

Regarding claim 9, Wang discloses "using blend information in the edit track to decrease the bit resolution of a pixel block" (Wang: figures 3 and 5d, column 15, lines 53-65, wherein the user can change the red, green and blue color values yielding a blending technique to obtain the desired color. Decreasing the color attributes would decrease the resolution of a pixel block).

Regarding claim 10, Wang discloses “the edit track defines a region within which a video edit has occurred and the type of edit that occurred within the region” (Wang: figures 3 and 9, wherein the frame difference, scene change, and segment determine the region and the color histogram and texture determine the type of edit).

Regarding claim 17, note the examiners rejection for claim 1, and in addition, Wang discloses “an edit track reader for accessing data within the edit track and generating instructions based on the data within the track” (Wang: figure 1, wherein the edit track reader is the processor which generates instructions). Although not disclosed, the video could be accompanied by an associated audio track (Official Notice). Doing so would have been obvious since storing audio and video is well known in the art.

Regarding claims 18 and 20, Suzuki discloses “the video compressor is an MPEG video compressor that provides compression with a single encoding” (Suzuki: column 2, lines 30-31).

3. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (5802361), (hereinafter referred to as “Wang”), in view of Suzuki et al. (5883672), (hereinafter referred to as “Suzuki”) in further view of Craven et al. (5649171), (hereinafter referred to as “Craven”).

Regarding claims 21-23, note the examiners rejection for claim 1, and in addition claims 21-23 differ from claim 1 in that claims 21-23 further require recording editing steps made by a user using video editing software. Craven

teaches that recording editing steps made by a user allows a user to later know exactly what occurred during editing and undo the effects if desired (Craven: figures 17, 20, column 17, lines 1-10). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Wang, infer that the edit track or side information file is used during compression shown by Suzuki, and add the recording process taught by Craven in order to obtain an apparatus that operates more efficiently by being able to provide information necessary to reverse undesirable results performed during an editing process.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US-6038256 03-2000 Linzer et al.

US-6115499 09-2000 Wang et al.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (571) 272-7327. The examiner can normally be reached on Monday - Friday 9 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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